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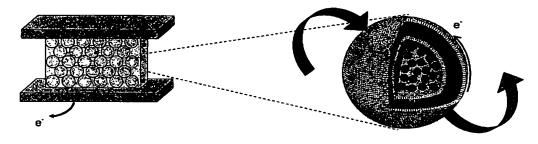
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(54) Title: SUSPENSION FOR THE GENERATION OF A CURRENT OF ELECTRONS AND THE USE AND THE PREPARATION THEREOF



(57) Abstract: The present invention relates to a suspension that can be used to generate a current of electrons, which suspension comprises a polypeptide, wherein the polypeptide is entrapped in a hollow particle. It furthermore relates to the use of the suspension described above for the production of a battery. More specifically the present invention relates to the use of the suspension described above for the production of a nano-battery for the use in combination with a microchip. The present invention also relates to a battery using the suspension described above. In another aspect the present invention relates to a fuel cell, comprising: an anode compartment including an anode; a cathode compartment including a cathode; and disposed within said anode compartment, within said cathode compartment, or between said anode compartment and said cathode compartment, the suspension described above. In addition the present invention relates to a device for detection of a solute using the suspension described above, and more specifically to a device for the detection of glucose. In still another aspect the present invention relates to a method of producing electrical power, comprising the use of the suspension described above. Furthermore the invention relates to a method for preparing the suspension described above, comprising the steps of (a) making an aqueous solution of bis(2,2'-bipyridine)ruthenium(II)bis(pyrazolyl); (b) injecting a solution containing polystyrene-b-poly(L-isocyanoalanine(2-thiophen-3-yl-ethyl)amide) in THF into the solution made in step (a) preferably also comprising (c) placing the dispersion made in step (b) at 60 °C; (d) cooling the dispersion to room temperature, and (e) filter the dispersion of step (d) using a filter with a cutoff of 100 kDa.

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